

CLAIM AMENDMENTS

1. (Withdrawn) Apparatus for reconfiguring tissue, said apparatus comprising:

a shaft having a distal end and a proximal end;

at least one effector mechanism movably mounted to said distal end of said shaft, each said effector mechanism comprising at least one gripping element for gripping tissue to that effector mechanism, said at least one effector mechanism being configured to capture the gripped tissue against said shaft;

at least one actuating mechanism mounted to said proximal end of said shaft; and

at least one connection mechanism connecting said at least one actuating mechanism to said at least one effector mechanism, whereby a user may utilize said at least one actuating mechanism to actuate said at least one effector mechanism so as to reconfigure tissue.

2. (Withdrawn) Apparatus according to claim 1 wherein said shaft is flexible.

3. (Withdrawn) Apparatus according to claim 1 wherein said shaft has a lumen extending therethrough.

4. (Withdrawn) Apparatus according to claim 3 wherein said lumen is sized to receive another instrument therein.

5. (Withdrawn) Apparatus according to claim 4 wherein said instrument comprises a working tool.

6. (Withdrawn) Apparatus according to claim 5 wherein said working tool comprises a stapler.

7. (Withdrawn) Apparatus according to claim 4 wherein said instrument comprises a scope.

8. (Withdrawn) Apparatus according to claim 1 wherein said apparatus comprises two effector mechanisms.

9. (Withdrawn) Apparatus according to claim 8 wherein said two effector mechanisms are pivotally mounted to said shaft.

10. (Withdrawn) Apparatus according to claim 9 wherein said distal end of said shaft comprises a longitudinal axis, and further wherein said two effector mechanisms are pivotally mounted to said shaft along a pivot axis extending parallel to said longitudinal axis of said distal end of said shaft.

11. (Withdrawn) Apparatus according to claim 10 wherein said two effector mechanisms are configured to move between (i) a closed position wherein said two effector mechanisms fold concentrically about said distal end of said shaft, and (ii) an open position wherein said two effector mechanisms rise like wings over said shaft.

12. (Withdrawn) Apparatus according to claim 11 wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained.

13. (Withdrawn) Apparatus according to claim 12 wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for maintaining the tissue in such engagement while suction is maintained.

14. (Withdrawn) Apparatus according to claim 13 wherein said distal end of said shaft comprises a plurality of gripping elements, with said gripping elements being positioned about the circumference of said shaft in the region covered by said effector mechanisms when said effector mechanisms are in said closed position.

15. (Withdrawn) Apparatus according to claim 14 wherein said gripping elements comprise suction pods.

16. (Withdrawn) Apparatus according to claim 15 wherein said distal end of said shaft comprises at least one fastening mechanism for securing tissue to tissue.

17. (Withdrawn) Apparatus according to claim 16 wherein said at least one fastening mechanism is adapted to extend radially outward from said distal end of said shaft.

18. (Withdrawn) Apparatus according to claim 17 wherein said mechanism comprises a staple.

19. (Withdrawn) Apparatus according to claim 1 wherein said at least one connection mechanism comprises a cable.

20. (Withdrawn) Apparatus according to claim 1 wherein said apparatus comprises one effector mechanism.

21. (Withdrawn) Apparatus according to claim 20 wherein said effector mechanism is pivotally mounted to said shaft.

22. (Withdrawn) Apparatus according to claim 21 wherein said distal end of said shaft comprises a longitudinal axis, and further wherein said effector mechanism is pivotally mounted to said shaft along a pivot axis extending transverse to said longitudinal axis of said distal end of said shaft.

23. (Withdrawn) Apparatus according to claim 22 wherein said effector mechanism is configured to move between (i) a closed position wherein said effector mechanism folds concentrically about said distal end of said shaft, and (ii) an open position wherein said effector mechanism rises over said shaft.

24. (Withdrawn) Apparatus according to claim 23 wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained.

25. (Withdrawn) Apparatus according to claim 24 wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for maintaining the tissue in such engagement while suction is maintained.

26. (Withdrawn) Apparatus according to claim 25 wherein said distal end of said shaft comprises a plurality of gripping elements, with said gripping elements being positioned about the circumference of said shaft in the region covered by said effector mechanism when said effector mechanism is in said closed position.

27. (Withdrawn) Apparatus according to claim 26 wherein said gripping elements comprise suction pods.

28. (Withdrawn) Apparatus according to claim 27 wherein said apparatus further comprises a septum extending between said shaft and said effector mechanism.

29. (Withdrawn) Apparatus according to claim 28 wherein said distal end of said shaft comprises at least one fastening mechanism for securing tissue to tissue.

30. (Withdrawn) Apparatus according to claim 29 wherein said at least one fastening mechanism is adapted to extend radially outward from said distal end of said shaft.

31. (Withdrawn) Apparatus according to claim 30 wherein said fastening mechanism comprises a staple.

32. (Withdrawn) Apparatus according to claim 1 wherein said apparatus comprises a plurality of effector mechanisms.

33. (Withdrawn) Apparatus according to claim 32 wherein said plurality of effector mechanisms extend out of the distal end of said shaft.

34. (Withdrawn) Apparatus according to claim 33 wherein said distal end of said shaft comprises a longitudinal axis, and further wherein said plurality of effector mechanisms extend parallel to said longitudinal axis of said distal end of said shaft.

35. (Withdrawn) Apparatus according to claim 34 wherein said plurality of effector mechanisms are configured to move between (i) a first position wherein said plurality of effector mechanisms collectively form a tubular configuration, and (ii) a

second position wherein said plurality of effector mechanisms collectively form a non-tubular configuration.

36. (Withdrawn) Apparatus according to claim 35 wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained.

36. (Canceled)

37. (Withdrawn) Apparatus for reconfiguring tissue, said apparatus comprising:

a shaft having a distal end and a proximal end, wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for selectively maintaining the tissue in such engagement;

two effector mechanisms movably mounted to said distal end of said shaft, each said effector mechanism comprising at least one gripping element for gripping tissue to that effector mechanism, said two effector mechanisms being configured to capture the gripped tissue against said shaft, wherein said distal end of said shaft comprises a longitudinal axis, wherein said two effector mechanisms are pivotally mounted to said shaft along a pivot axis extending parallel to said longitudinal axis of said distal end of said shaft, wherein said two effector mechanisms are configured to move between (i) a closed position wherein said two effector mechanisms fold concentrically about

said distal end of said shaft, and (ii) an open position wherein said two effector mechanisms rise like wings over said shaft, and wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained;

at least one actuating mechanism mounted to said proximal end of said shaft; and

at least one connection mechanism connecting said at least one actuating mechanism to said two effector mechanisms, whereby a user may utilize said at least one actuating mechanism to actuate said two effector mechanisms so as to reconfigure tissue.

38. (Withdrawn) Apparatus for reconfiguring tissue, said apparatus comprising:

a shaft having a distal end and a proximal end, wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for maintaining the tissue in such engagement while suction is maintained;

an effector mechanism movably mounted to said distal end of said shaft, said effector mechanism comprising at least one gripping element for gripping tissue to that effector mechanism, said effector mechanism being configured to capture the gripped tissue against said shaft, wherein said distal end of said shaft comprises a longitudinal axis, wherein said effector mechanism is pivotally mounted to said shaft along a pivot axis extending



transverse to said longitudinal axis of said distal end of said shaft, wherein said effector mechanism is configured to move between (i) a closed position wherein said effector mechanism folds concentrically about said distal end of said shaft, and (ii) an open position wherein said effector mechanism rises over said shaft, and wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining tissue in such engagement while suction is maintained;

at least one actuating mechanism mounted to said proximal end of said shaft; and

at least one connection mechanism connecting said at least one actuating mechanism to said effector mechanism, whereby a user may utilize said at least one actuating mechanism to actuate said effector mechanism so as to reconfigure tissue.

39. (Withdrawn) Apparatus for reconfiguring tissue, said apparatus comprising:

a shaft having a distal end and a proximal end;

a plurality of effector mechanisms mounted to said distal end of said shaft, each said effector mechanism comprising at least one gripping element for gripping tissue to that effector mechanism, said plurality of effector mechanisms being configured to capture the gripped tissue against said shaft, wherein said distal end of said shaft comprises a longitudinal axis, wherein said plurality of effector mechanisms extend parallel to said longitudinal axis of said distal end of said shaft, wherein said plurality of effector mechanisms are

configured to move between (i) a first position wherein said plurality of effector mechanisms collectively form a tubular configuration, and (ii) a second position wherein said plurality of effector mechanisms collectively form a non-tubular configuration, and wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained;

at least one actuating mechanism mounted to said proximal end of said shaft; and

at least one connection mechanism connecting said at least one actuating mechanism to said plurality of effector mechanisms, whereby a user may utilize said at least one actuating mechanism to actuate said plurality of effector mechanisms so as to reconfigure tissue.

40. (Currently Amended) A method for reconfiguring tissue, ~~said the~~ method comprising:

providing an apparatus comprising:

a shaft having a distal end and a proximal end, ~~wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for selectively maintaining the tissue in such engagement and~~ adapted to provide a suction therethrough;

a flexible tube mounted on the shaft and disposed parallel to the shaft;

two effector mechanisms movably mounted ~~to said~~ on the distal end of ~~said the~~ shaft, each ~~said~~ effector mechanism

comprising at least one ~~gripping~~ suction element in communication with the shaft suction for gripping tissue ~~to that effector mechanism, said the~~ two effector mechanisms being configured to capture ~~the~~ gripped tissue against ~~said shaft~~ an outer surface of the flexible tube, wherein ~~said a~~ a distal end of ~~said the~~ the shaft comprises a longitudinal axis, wherein ~~said the~~ the two effector mechanisms are pivotally mounted ~~to said~~ on the shaft along a pivot axis extending parallel to ~~said the~~ the longitudinal axis ~~of said distal end of said the shaft and a longitudinal axis of the tube~~, wherein ~~said the~~ the two effector mechanisms are each configured to move between (i) a closed position wherein ~~said the~~ the two effector mechanisms fold concentrically about ~~said the~~ the distal end of ~~said shaft the~~ the flexible tube, and (ii) an open position wherein ~~said the~~ the two effector mechanisms ~~rise like wings~~ are disposed over ~~said shaft the flexible tube~~, and wherein ~~said~~ at least one gripping element comprises a suction pod for drawing tissue ~~against~~ into engagement with the effector mechanism and for maintaining the tissue in such engagement while suction is maintained;

at least one actuating mechanism ~~mounted to~~ in communication with ~~said the~~ the proximal end of ~~said the~~ the shaft; and

at least one connection mechanism connecting ~~said~~ at least one actuating mechanism to ~~said the~~ the two effector mechanisms, whereby a user may utilize ~~said the~~ the at least one actuating mechanism to actuate ~~said the~~ the two effector mechanisms and the suction therethrough so as to reconfigure tissue;

positioning ~~said the~~ the two effector mechanisms in ~~said a~~ a closed position;

advancing ~~said~~ the apparatus so that ~~said~~ the distal end of ~~said~~ the shaft is positioned adjacent tissue to be reconfigured;

positioning ~~said~~ the two effector mechanisms in ~~said~~ an open position;

~~gripping~~ engaging tissue ~~against said~~ proximate the distal end of ~~said~~ the shaft and against ~~said~~ the two effector mechanisms; and

positioning ~~said~~ the two effector mechanisms in ~~said~~ a closed position and applying suction to the effector mechanisms so as to reconfigure the ~~gripped~~ tissue and capture ~~that~~ the tissue against ~~said shaft~~ the flexible tube.

41. (Currently Amended) A method according to claim 40 wherein ~~said~~ the method comprises ~~the~~ an additional step of securing the tissue in ~~its~~ the reconfigured condition.

42. (Currently Amended) A method according to claim 40 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus.

43. (Currently Amended) A method according to claim 42 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus wrapped by stomach tissue.

44. (Withdrawn) A method for reconfiguring tissue, said method comprising:

providing apparatus comprising:

a shaft having a distal end and a proximal end, wherein said distal end of said shaft comprises at least one gripping element for drawing tissue against said shaft and for maintaining the tissue in such engagement while suction is maintained;

an effector mechanism movably mounted to said distal end of said shaft, said effector mechanism comprising at least one gripping element for gripping tissue to that effector mechanism, said effector mechanism being configured to capture the gripped tissue against said shaft, wherein said distal end of said shaft comprises a longitudinal axis, wherein said effector mechanism is pivotally mounted to said shaft along a pivot axis extending transverse to said longitudinal axis of said distal end of said shaft, wherein said effector mechanism is configured to move between (i) a closed position wherein said effector mechanism folds concentrically about said distal end of said shaft, and (ii) an open position wherein said effector mechanism rises over said shaft, and wherein said at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining tissue in such engagement while suction is maintained;

at least one actuating mechanism mounted to said proximal end of said shaft; and

at least one connection mechanism connecting said at least one actuating mechanism to said effector mechanism, whereby a user may utilize said at least one actuating mechanism to actuate said effector mechanism so as to reconfigure tissue;

positioning said effector mechanism in said closed position;

advancing said apparatus so that said distal end of said shaft is positioned adjacent tissue to be reconfigured;

positioning said effector mechanism in said open position;

gripping tissue against said distal end of said shaft and against said effector mechanism; and

positioning said effector mechanism in said closed position so as to reconfigure the gripped tissue and capture that tissue against said shaft.

45. (Withdrawn) A method according to claim 44 wherein said method comprises the additional step of securing the tissue in its reconfigured condition.

46. (Currently Amended) A method according to claim 42 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus.

47. (Currently Amended) A method according to claim 46 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus wrapped by stomach tissue.

48. (Currently Amended) A method for reconfiguring tissue, ~~said~~ the method comprising:

providing apparatus comprising:

a shaft having a distal end and a proximal end;

a plurality of effector mechanisms mounted to ~~said~~ the distal end of ~~said~~ the shaft, each ~~said~~ effector mechanism comprising at least one gripping element for gripping tissue ~~to that effector mechanism~~, ~~said~~ the plurality of effector mechanisms being configured to capture ~~the~~ gripped tissue against ~~said~~ the shaft, wherein ~~said~~ the distal end of ~~said~~ the shaft ~~comprises~~ exhibits a longitudinal axis, wherein ~~said~~ the plurality of effector mechanisms extend parallel to ~~said~~ the longitudinal axis of ~~said~~ the distal end of ~~said~~ the shaft, wherein ~~said~~ the plurality of effector mechanisms are configured to move between (i) a first position wherein ~~said~~ the plurality of effector mechanisms collectively form a tubular configuration, and (ii) a second position wherein ~~said~~ the plurality of effector mechanisms collectively form a non-tubular configuration, and wherein ~~said~~ the at least one gripping element comprises a suction pod for drawing tissue against the effector mechanism and for maintaining the tissue in such engagement while suction is maintained;

at least one actuating mechanism mounted ~~to~~ ~~said~~ in the proximal end of ~~said~~ the shaft; and

at least one connection mechanism connecting ~~said~~ the at least one actuating mechanism to ~~said~~ the plurality of effector mechanisms, whereby a user may utilize ~~said~~ the at least one actuating mechanism to actuate ~~said~~ the plurality of effector mechanisms so as to reconfigure tissue;

positioning ~~said~~ the effector mechanisms in ~~said~~ the first position;

advancing ~~said~~ the apparatus so that said distal end of said shaft is positioned adjacent tissue to be reconfigured;

applying a suction to the suction ports of the actuator end of the shaft and thereby to the suction ports of the effector mechanisms, thereby gripping tissue against ~~said~~ the distal end of ~~said~~ the shaft and against ~~said~~ the effector mechanisms; and

positioning ~~said~~ the effector mechanisms in ~~said~~ the second position so as to reconfigure the gripped tissue and capture ~~that~~ the tissue against ~~said~~ the shaft.

49. (Currently Amended) A method according to claim 48 ~~wherein said method comprises~~ comprising the additional step of securing the tissue in ~~it's~~ the reconfigured condition.

50. (Currently Amended) A method according to claim 48 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus.

51. (Currently Amended) A method according to claim 50 wherein ~~said~~ the tissue comprises stomach tissue reconfigured into a neoesophagus wrapped by stomach tissue.

52 - 54. (Canceled)